

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/014102

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G01N27/12, G01N21/75, G01N27/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G01N27/00-27/49, G01N21/00-21/83

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

JICST FILE (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Hiroo TAKAHASHI, Hideki YAMAGAMI, Hitoshi MIZUKUCHI, "Dipyridyl pyrrolo prytolo no Kessho Takei to Denshi Kozo", JAPAN	1-3, 4-6, 10-11, 14-16, 17-19
Y	HARDCOPY 2002 FALL MEETING Dai 90 Kai Nihon Gazo Gakkai Kenkyu Toronkai, pages 53 to 56, 2002	7-8, 12, 13
X	J. MIZUGUCHI, Solution and Solid State Properties of 1, 4-Diketo-3, 6-bis-(4'-pyridyl)-pyrrolo-[3,4-c]-pyrrole on Protonation and Deprotonation, Ber.Bunsenges. Phys.Chem., 1993, No.97, Vol.5, pages 684 to 693	1-3, 17-19

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

21 October, 2004 (21.10.04)

Date of mailing of the international search report

09 November, 2004 (09.11.04)

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PCT/JP2004/014102

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2003-240746 A (Matsushita Electric Industrial Co., Ltd.), 27 August, 2003 (27.08.03), Claims; Par. Nos. [0021] to [0025] (Family: none)	7-8, 12, 13
X	JP 57-120847 A (Nippon Telegraph And Telephone Corp.), 28 July, 1982 (28.07.82), Full text; Figs. 1 to 2 (Family: none)	1, 3, 17, 19
Y	JP 3-75551 A (Omron Corp.), 29 March, 1991 (29.03.91), Full text; Figs. 1 to 3 (Family: none)	1, 17
X	JP 9-249815 A (Ebara Corp.), 22 September, 1997 (22.09.97), Full text; Figs. 1 to 4	1, 17
A	JP 62-11159 A (Massachusetts Institute of Technology), 20 January, 1987 (20.01.87), Full text; all drawings & AU 5030685 A1 & EP 185941 A2 & US 4717673 A1 & US 4721601 A1 & WO 89/004061 A1 & CA 1256542 A & CA 1260159 A & US 4895705 A1 & AU 4787990 A & US 4929313 A1 & US 4993956 A1 & JP 3-502419 A & US 5034192 A1 & JP 2073456 C & JP 3071789 B	1-19
A	JP 5-10908 A (Ryuichi YAMAMOTO), 19 January, 1993 (19.01.93), Full text; all drawings & DE 4221189 A & US 5273841 A1 & JP 6-52904 A & KB 211089 B	1-19
A	JP 6-160319 A (Hughes Aircraft Co.), 07 June, 1994 (07.06.94), Full text; all drawings & EP 584557 A1 & US 5331287 A1 & DE 69326726 T	1-19